

ABSTRACT

An ethylene (co)polymer of the present invention is a (co)polymer with excellent moldability and mechanical properties and either an ethylene homopolymer or a

5 copolymer of ethylene and an α -olefin of 4 to 20 carbon atoms. The (co)polymer has methyl branches measured by ^{13}C -NMR less than 0.1 in number per 1,000 carbon atoms and M_w/M_n measured by GPC not lower than 1.8 and lower than 4.5. The (co)polymer is either an ethylene

10 homopolymer or a copolymer of ethylene and an α -olefin of 3 to 20 carbon atoms. The melt tension (MT) and the swell ratio (SR) satisfy the relation; $\log(\text{MT}) > 12.9 - 7.15 \times \text{SR}$; and the intrinsic viscosity ($[\eta]$) and the melt flow rate (MFR) satisfy the relation; $[\eta] > 1.85 \times \text{MFR}^{-0.192}$ in the case of $\text{MFR} < 1$ and the relation; $[\eta] > 1.85 \times \text{MFR}^{-0.213}$ in the case of $\text{MFR} \geq 1$. Such an ethylene

15 (co)polymer can be usable for various molding applications and especially suitable for pipes.